KINETEC®

USER'S MANUAL

5190

SERIE 1-2
U.S.A

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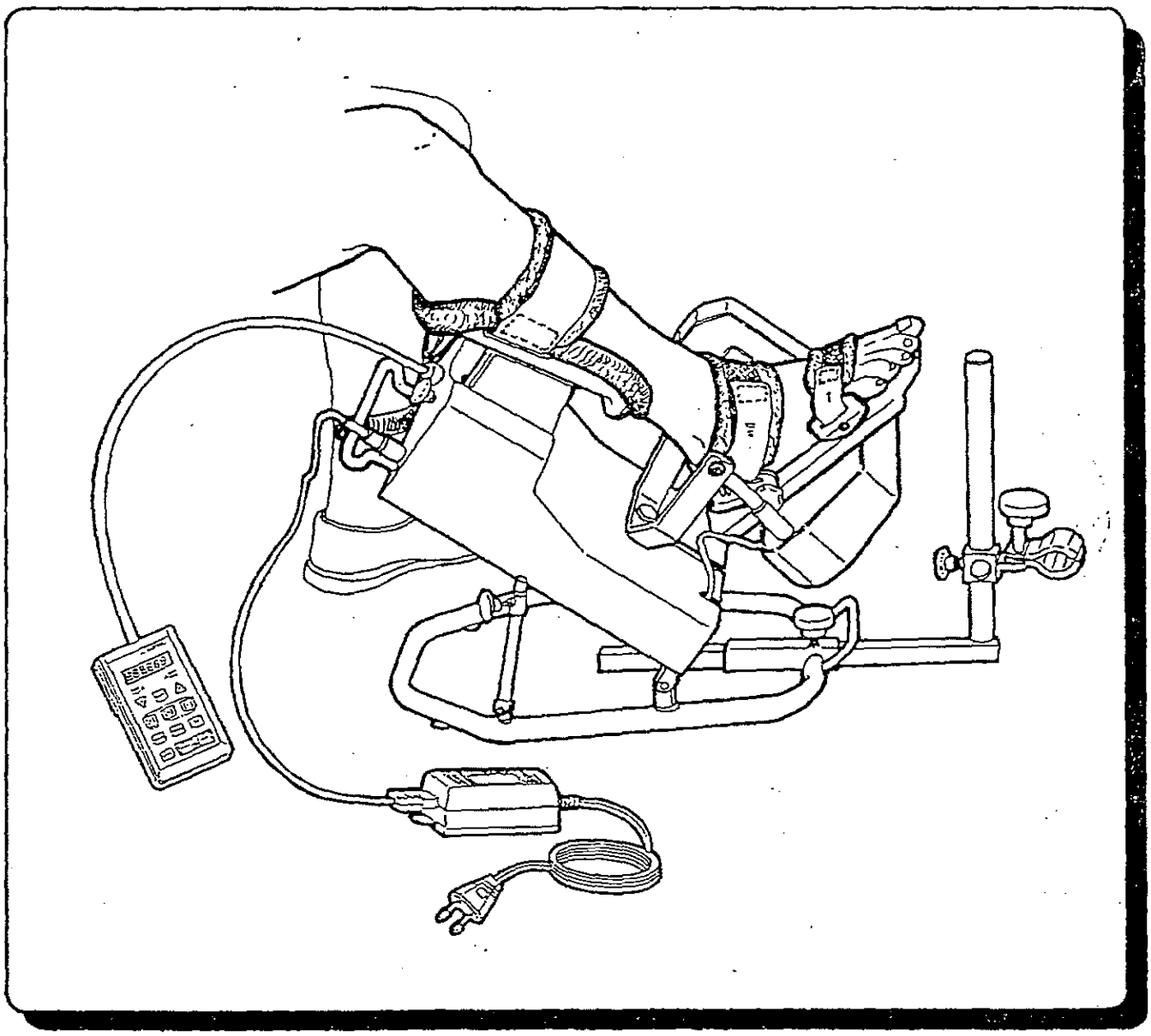

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I INTRODUCING THE MACHINE

DEFINITION

The KINETEC 5190 may be used foe all ankyloses provided the articulary surface have been respected or are only slightly out of shape.
the use of KINETEC 5190 machine during the immediate post operative period allows tp have better R.O.M for the 3 joints, Tibio-tarsal, Sub-talar and Medio-tarsal.

DESCRIPTION

The rear foot joint passive mobilization apparatus gives the foot a three-dimensional movement reproducing the foot movements exactly :

- *Plantar flexion / Dorsal flexion*
- *Adduction, Varus / Abduction, Valgus*
- *Inversion / Eversion*

The KINETEC 5190 is made up :

A - Smith + Nephew Richards Power Supply model 7808
(For replacement power supply contact Smith + Nephew Richards at 1-800-238-7538)

B - The control unit
It enables you to programme and to visualize various parameters.

C - The foot moving device
This mobile part reproduces the various foot movements.

D - The support for the patients leg.

E - The machine body
This includes the control electronics in particular.

F - Data processing liaison
This make it possible to find out the results of a sitting.

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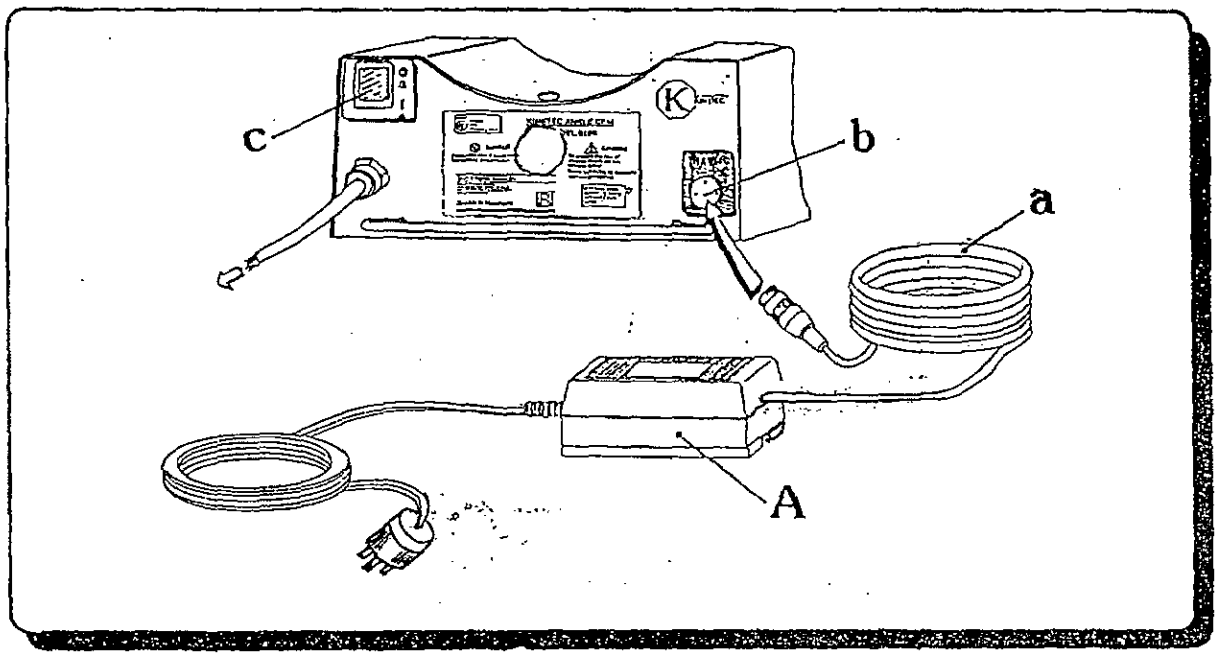
II CONNECTING THE MACHINE

UNPACKING THE SPLINT

- *Connect the (a) cable to the exerciser in (b).*
- *Connect the transformer (A) to a 240/220 volts∿-50Hz or 110 V∿-60Hz or 100 V∿- 50Hz current outlet. (Electric power : 40 VA)*



SECURITY CHARACTERISTICS

- *The machine has now been powered with a safe voltage : 12 Volts∿.*
- *Appareil of CLASS II and TYP B.*
- *The flexion or extension drive force setting enables the practitioner to vary the forec exerced by the apparatus.*
- *The control unit has a STOP key for stopping the movement and a START key for reversing the movement.*

STARTING UP THE APPARATUS

- *Press the ON/OFF button (item c)*

The button (item c) lights up
The control unit shows a patient CODE number,
if this one is programmed, if not TIME OF SESSION is displayed.

If the button (item c) fails to light up, and if the control unit shows no data, see chapter VII TECHNICAL AID

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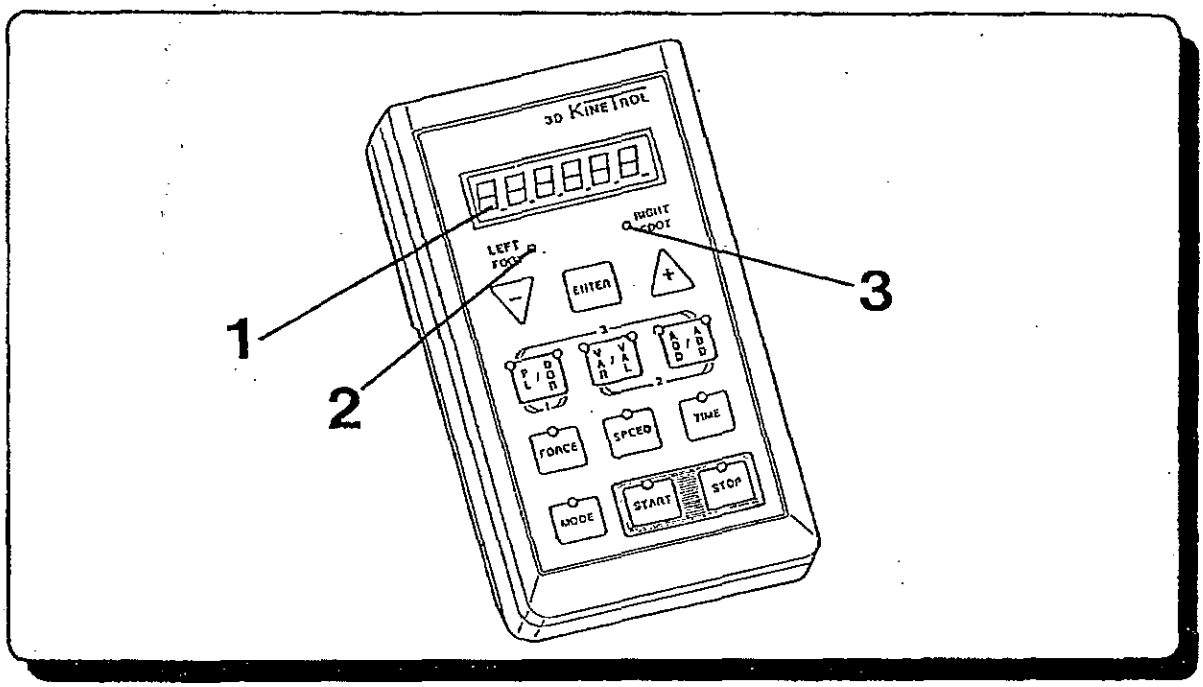
III HOW TO USE THE CONTROL UNIT

DESCRIPTION



- *The display panel (Item 1)*
  displays 6 letters or 6 ciphers.

- *The pilot lights or LEDs (Item 2 and 3)*
  let you know at all times which foot the machine is set for.

  - *the No.2 LED lights up when the splint is set for the left foot, and*
  - *the No.3 LED lights up when the splint is set for the right foot.*

KEY FUNCTIONS

While programming, this key allows you to :
- *REDUCE the values,*
  by punching (applying pressure for less 2 seconds), by 1 unit of value, and
  by prolonged pressure (over 2 seconds), by 3 units of value per second; and to
- *PROGRAM the work on the LEFT FOOT.*

While programming, this key allows you to :
- *INCREASE the values,*
  by punching (applying pressure for less 2 seconds), by 1 unit of value, and
  by prolonged pressure (over 2 seconds), by 3 units of

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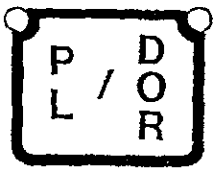
This key is to VALIDATE every change in values. It lends a helping hand to the user for the rest of his or her "dialogue" with the apparatus.



Key to read or to program PLANTAR or DORSAL FLEXION

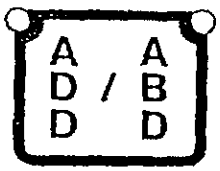
When the left-hand LED lights up, the displayed value is PLANTAR FLEXION.
When the right-hand LED lights up , the displayed value is DORSAL FLEXION.

RANGE :
Maximum PLANTAR FLEXION = 40°
Maximum DORSAL FLEXION = 30°

Key to read or to program VARUS / VALGUS

When the left-hand LED lights up, the displayed value is the VARUS
When the right-hand LED lights up, the displayed value is the VALGUS

RANGE :
Maximum VARUS = 25°
Maximum VALGUS = 25°



Key to read or program ABDUCTION / ADDUCTION

When the left-hand LED lights up, the displayed valued is the ADDUCTION
When the right-hand LED lights up, the displayed value is the ABDUCTION

RANGE :
Maximum ADDUCTION = 25°
Maximum ABDUCTION = 25°

Key to read or program SPEED

When the LED lights up, the displayed value is the SPEED. The values shown go from 1 to 10

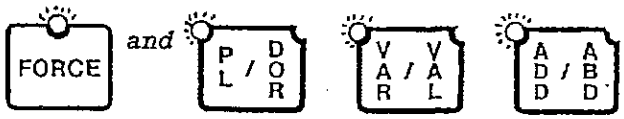
RANGE :
SPEED 1 = Minmum SPEED
SPEED 10 = Maximum SPEED

FORCE

Key to read or program the FORCE

When the LED lights up, the displayed value is FORCE. This LED always lights up at the same time as other LEDs located above the movement read-or-program keys indicating the direction of the force displayed.

Example :



The FORCE displayed = Force set for the PLANTAR FLEXION / VARUS / ADDUCTION movement

The values recorded may go from 1 to 5

RANGE :
FORCE 1 = Minimum FORCE
FORCE 5 = Maximum FORCE

TIME

Key to program the SESSION TIME and to read the TIME REMAINING to end of SESSION.

When the LED lights up, the value displayed is the SESSION TIME, or the time remaining until the end of the session. The values recorded vary by 15-minute intervals

RANGE :
Maximum SESSION TIME = 23.45 hours
Minimum SESSION TIME = 15 minutes

START

Key to START OPERATING

When the LED lights up, the machine is operational and the display shows the real value of the angle :

- *in MODE 1 or 3, the angle of the PLANTAR FLEXION or the DORSAL FLEXION*
- *in MODE 2, the angle of VARUS or VALGUS*

STOP

Key to STOP MOVEMENT

When the led lights up, the movements have been stopped and a START key for reversing the movement.

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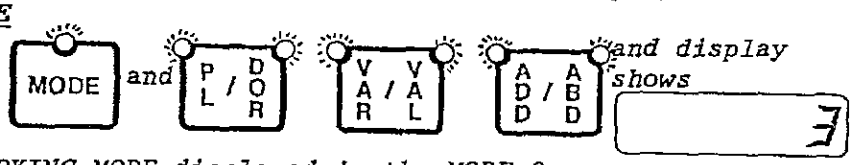
Key to read or program the WORKING MODE

When the LED lights up, the displayed value is the number of the programmed WORKING MODE. This led always lights up at the same time as other leds located above the movement read-or-program keys indicating the MODE displayed.

EXAMPLE



The WORKING MODE displayed is the MODE 3.

REMARK :

In read, leds of motions light up and the led of the key MODE is blinking.
In program, leds of motions are blinking and the led of the key MODE lights up.

***RANGE** : 3 different MODES available*

MODE 1 = 1 single movement in
PLANTAR FLEXION / DORSAL FLEXION
MODE 2 = 2 synchronized movements in
ADDUCTION - VARUS / ADDUCTION - VALGUS
with a set component of 15° PLANTAR FLEXION.
MODE 3 = 3 synchronized movements respecting the physiological movement.
PLANTAR FLEXION - ADDUCTION - VARUS /
/ DORSAL FLEXION - ABDUCTION - VALGUS

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HOW TO KEY IN A PROGRAM 2

PROCEDURE TO FOLLOW

- *Fill out the "HELP IN PROGRAMMING SHEET" on the basis of the clinical examination of the foot.*
- *Define the values to be programmed.*
- *Stop the machine. The STOP LED must be lighted up.*

***REMARKS :** Throughout the programming operation, it is important that you should answer all the questions indicated on the LEDs and the DISPLAY PANEL.*

Programming example

PATIENT PROTOCOLE PROGRAMMING SHEET

PATIENT'S FAMILY NAME : NORMAND — DATE : 10/12/90

FIRST NAME : PASCAL

DATE OF BIRTH : 14/03/66 — PATIENT HOSPITAL CODE :

INDICATIONS

MODE 1 PL. / DO. / MODE 2 VAR. / ADD VAL. / ABD / MODE 3 PL. / DO. VAR. / ADD VAL. / ABD	RESULT OF THE CLINICAL EXAMINATION DATE 10/12/90		CALCULATION PROGRAM PRG. 1 to 10										RESULT OF THE CLINICAL EXAMINATION DATE __/__/__	
FOOT	RIGHT	LEFT ∝	L	L	L	L	L	L	L	L			RIGHT	LEFT
MODE			1	1	2	2	3	3	3	3				
PLANTAR FLEXION		10	8	10			15	25	33	40				
DORSAL EXTENSION		(-5)	2	5			0	10	15	20				
** VARUS		6			5	10	**	**	**	**				
** VALGUS		0			0	5	**	**	**	**				
* ADDUCTION		5			*	*	**	**	**	**				
* ABDUCTION		0			*	*	**	**	**	**				
SPEED			3	3	3	3	5	6	8	10				
PAIN SENS. FLEXION			1	1	1	2	2	3	4	5				
PAIN SENS. EXTENSION			1	1	1	2	2	3	4	5				
SESSION TIME			1H	1H	1H	1H	1H	1H	1H	1H				
NUMBER OF SESSIONS			1	1	1	1	1	1	1	1				

OBSERVATIONS :

* On MODE 2 the ADDUCTION / ABDUCTION amplitudes are calculated automatically from the VALGUS / VARUS programmed.

** On MODE 3 the VARUS / VALGUS and ADDUCTION / ABDUCTION amplitudes are calculated automatically from the PLANTAR FLEXION / DORSAL EXTENSION programmed amplitudes.

* *On MODE 2 the ABDUCTION / ADDUCTION amplitudes are calculated automatically from the VARUS / VALGUS amplitudes programmed.*

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** *On MODE 3 the VARUS / VALGUS and ABDUCTION / ADDUCTION amplitudes are calculated automatically using the PLANTAR FLEXION / DORSAL FLEXION amplitudes programmed.*

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The following procedure may be applied to all types of programs.

AS A PROGRAMMING EXAMPLE, WE HAVE CHOSEN THE RETRIEVAL OF PROGRAM N°. 8 FROM THE HELP IN PROGRAMMING SHEET (the most complex case - all the values must be programmed).

Beginning	*keys to press*	*Display*	*Remarks*
	STOP	StoP	*Display shows STOP*
- *Press all three keys at once*	− ENTER +		
- *Release keys*		PrG 1	*The number displayed is the program number.*
- *To change the program number*	− OU +	PrG 8	*The number displayed is the new program number.*
- *To validate the program number*	ENTER	LEFt	*The display is giving LEFT OR RIGHT* *LEFT for left foot* *RIGHT for right foot* *The green light concerning programmed foot key goes on.*
- *To change the programmed foot*	− OU +	r IGHt	*The light of foot goes on.* *The display is giving RIGHT for give the right foot is programed.*
- *To validate and to Displaye the MODE*	ENTER	P 1	*A "P" is displayed to indicate that the user is in a program.* *The light of the* MODE *key goes on* *and leds of concerning motions are blinking.* *The display is giving the programmed MODE.*
- *To change the MODE if necessary*	− OU +	P 3	*The displaye gives the new MODE forecasted and leds of new concerning motions are blinking.*
- *To validate the MODE 3*	ENTER	P 10	*The next value is displayed, wich is PLANTAR FLEXION.* *The left light of the* P / D *key goes on*

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Beginning	keys to press	Display	Remarks
- To change the PLANTAR FLEXION if necessary	− OU +	P 40	The value displayed is the new value of the PLANTAR FLEXION.
- To validate the PLANTAR FLEXION	ENTER	P 5	The next value is displayed, which is the DORSAL FLEXION. The right light of the PL / DOR key goes on.
- To change the DORSAL FLEXION if necessary	− OU +	P 20	The value displayed is the new value of the DORSAL FLEXION.
- To validate the DORSAL FLEXION	ENTER	P 25	The next value is displayed, which is varus. The left light of the VAR / VAL key goes on. It is possible to read the value only.
-To validate	ENTER	P 16	The left light of the VAR / VAL key goes off and the right light goes on. The value displayed is the VALGUS value.
- To validate	ENTER		The right light of the VAR / VAL key goes off. The left light of the ADD / ABD key goes on.
		P 25	The value displayed is the ADDUCTION value.
- To validate	ENTER		The left light of the ADD / ABD key goes off.

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Beginning	keys to press	Display	Remarks
		P 16	The right light goes on. The value displayed is ABDUCTION value.
- To validate	ENTER	P 7	The next value is displayed, which is SPEED. The green light of the SPEED key goes on.
- To change the SPEED if necessary	− OU +	P 10	The value displayed is the new value of the SPEED.
- To validate the SPEED	ENTER	P 4	The next value is displayé, which is PLANTAR LOAD. The green light of the FORCE key goes on and leds of concerning motions are blinking.
- To change the LOAD way + if necessary	− OU +	P 5	The value displayed is the new value of LOAD way +.
- To validate the LOAD way +.	ENTER	P 1	The next value is displayed, which is DORSAL LOAD. The green light of the FORCE stay key goes or and leds of concerning motions are blinking.
- To Change the LOAD way - if necessary	− OU +	P 5	The value displayed is the new value of LOAD way -.
- To validate the LOAD way -	ENTER	Cod 27	The next value is displayed, which is the PATIENT CODE if this one is programmed (if not, TIME OF SESSION is displayed)
- To validate the PATIENT CODE	ENTER	3.45	The next value is displayed, which is the SESSION TIME. The green light of the the

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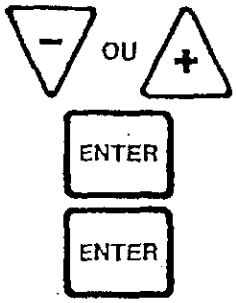
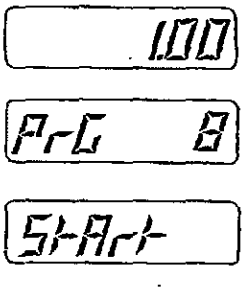
Beginning	keys to press	Display	Remarks
- To change the SESSION TIME, if necessary - To validate the SESSION TIME - To validate the PROGRAM N°			The value displayed is the new SESSION TIME value. The displaye gives the PROGRAM N° selected. The green light of the START key starts blinking. At this point, the key START is the only one you are allowed to press.

The movement begins where it left off.

READING THE VALUES OF A PROGRAM

Whether the machine is operating or whether it has been stopped, the patient or the practitioner can READ THE PROGRAMMED VALUES at any time.

All he has to do is press the desired key, and the diode over that key blinks while the programmed value is displayed on the display panel for 3 seconds.

Reading the amplitudes (+ goniometer function) :

- *when you push the key the left led blinks and the display indicates the program value of this movement,*
- *after 3 seconds or when you push again this key, the right led blinks and the display indicates the program value of the selected movement,*
- *after 3 seconds or when you push, always the same key, the display indicates the actual angle of the selected movement and the led of this movement lights.*

After 3 seconds or when you push again on this key, the LED stops blinking, and the display panel indicates the real angle values once again.(in MODE 1 or 3, the angle of the PLANTAR FLEXION or the DORSAL FLEXION, in MODE 2, the angle of VARUS or VALGUS)

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HOW DO YOU CHANGE PROGRAMS ?

Beginning	keys to press	Display	Remarks
- Stop the splint in oder to access the programming mode	STOP	StoP	The red light of the STOP key goes on.
- Press all three keys at once	− ENTER +		
- Release keys		PrG 8	The number displayed is the program number.
- To change the program number.	− OU +	PrG 1	The number displayed is the new program number.
- To validate the program number	ENTER	LEFt	The display is giving LEFT OR RIGHT LEFT for left foot RIGHT for right foot The green light concerning programmed foot key goes on.
- Exit from program	START OU STOP	Cod 27 345	The display gives the PATIENT CODE if this one is programmed (if not, TIME OF SESSION is displayed)
- Start a cycle	START	39	The number displayed is the actual angle of the foot.

HOW DO YOU MODIFY ONE PROGRAM VALUE ?

FOR EXAMPLE : SPEED

Beginning	keys to press	Display	Remarks
- Stop the splint in oder to access the programming mode	STOP	StoP	The red light of the STOP key goes on.
- Press all three keys at once	− ENTER +		

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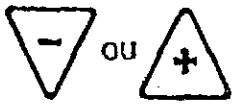
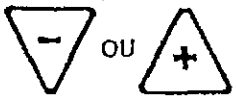
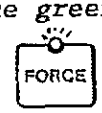
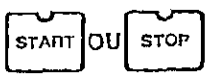
Beginning	keys to press	Display	Remarks
- To change the program number		PrG 2	The number displayed is the new program number.
OR - To validate the program number		LEFt	The display is giving LEFT OR RIGHT LEFT for left foot RIGHT for right foot The green light concerning programmed foot key goes on.
- Choise the SPEED		P 4	A "P" is displayed to indicate that the user is in a program. The displayed value is the SPEED The green light of the key goes on.
- To change the SPEED		P 9	The value displayed is the new SPEED value.
- To validate the SPEED			The green light of the key goes off.
		P 5	The next value is displayed, which is the LOAD, the green light of the  goes on and the leds of concerning motions are blinking.
- Exit from program		Cod 1 3.45	The displayed value is the PATIENT CODE if this one is programmed (if not, TIME OF SESSION is displayed)
- Start a cycle		4	The number displayed is the actual angle of the foot.

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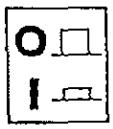
IV STARTING UP THE APPARATUS

WITH THE SAME PROGRAM AND THE SAME PATIENT AS AT THE PREVIOUS SESSION

Beginning	keys to press	Display	Remarks
- Start a run		Cod 1	Patient code if this one is programmed (if not, TIME OF WORKING is displayed)
- To validate	ENTER	4.00	Displays the time of the last session. The green light of the TIME key goes on.
- Start a cycle	START		The green light of the START key goes on.
		10	The value displayed is the actual angle of the foot (PLANTAR / DORSALE FLEXION with MODE 1 and 3; VARUS / VALGUS with MODE 2). The value changes at the speed of the movement. The light emitting LEDs of the mouvements under way light up and go off when you go through the zero point.
- Stop a cycle	STOP	StoP	The green light of the START key goes off. The red light of the STOP key goes on.
- Start a cycle	START		The green light of the START key goes on.
		39	Movement starts back up in opposite direction. The values displayed is the actual angle.

Remark : The figures shown in the display column are examples. In reality, the values displayed depend on what is stored in memory.

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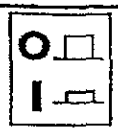
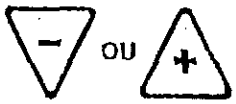
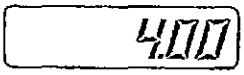
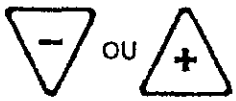
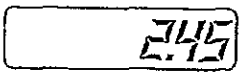
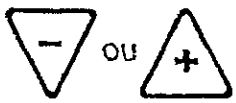
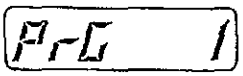
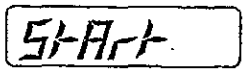
WHEN CHANGING THE PROGRAM AND THE PATIENT

Beginning	keys to press	Display	Remarks
- Start a run			Patient code if this one is programmed (if not, TIME OF WORKING is displayed)
- To change the PATIENT CODE			
- To validate the PATIENT CODE			Displays time of the last session. The green light of the key goes on.
- To change the SESSION TIME			One pulse change the time by 15'. Holding the key down causes the values to go up or down
- To validate the new SESSION TIME			The preceding program number displayed.
- To change the PROGRAM NUMBER			One pulde change the number by one unit.
- To validate the PROGRAM NUMBER			The green light of the key starts blinking.
- Start a cycle			The green light of the key goes on.
			The number displayed is the actual angle of the foot (PLANTAR / DORSALE FLEXION with MODE 1 and 3; VARUS / VALGUS with MODE 2).
			The value change at the speed of the movement.

Remark : The figures shown in the display column are examples. In reality, the values displayed depend on what is stored in memory.

MODIFYING THE SESSION TIME

Beginning	keys to press	Display	Remarks
- *Stop the splint*	STOP	StoP	*Display shows STOP.*
- *Press the button*	TIME	3.12	*Display shows remaining SESSION TIME.* TIME
IMPORTANT : *If any modification it is, after 3 second the display shows*			
- *Modifying duration SESSION TIME*	− OU +	3.45	*Display shows the new remaining time of the session*
- *To validate the new SESSION TIME*	ENTER	StoP	*The red light of the* STOP *key goes on.*
- *Start a cycle*	START		*The red light of the* STOP *key goes off.* *the green light of the* START *key goes on.*
		6	*The number displayed is the actual angle of the foot (PLANTAR / DORSALE FLEXION with MODE 1 and 3; VARUS / VALGUS with MODE 2).* *The value change at the speed of the movement.*

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The KINETEC ankle machine (5190) may be used in a chair (Fig.1) or in a bed with the prop (Ref: 4670012176.

USE IN A CHAIR

Fig.1

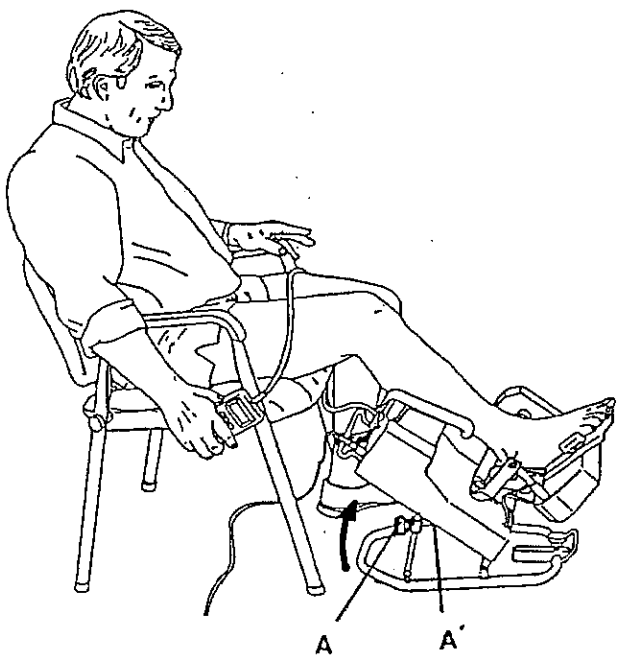

Fig.1

- *The patient is comfortably positionned in his chair.*
- *Place the machine in front of him.*
- *The machine should be at maximum tilt obtained by :*
  - *unscrew knobs A and A'*
  - *raise the machine gently to the end stop*
  - *re-tighten knobs A and A'*
- *Place the patient's leg on the machine.*

These first adfustments should be fine tuned after fixing the foot to the machine.

USE IN BED

Fig.2

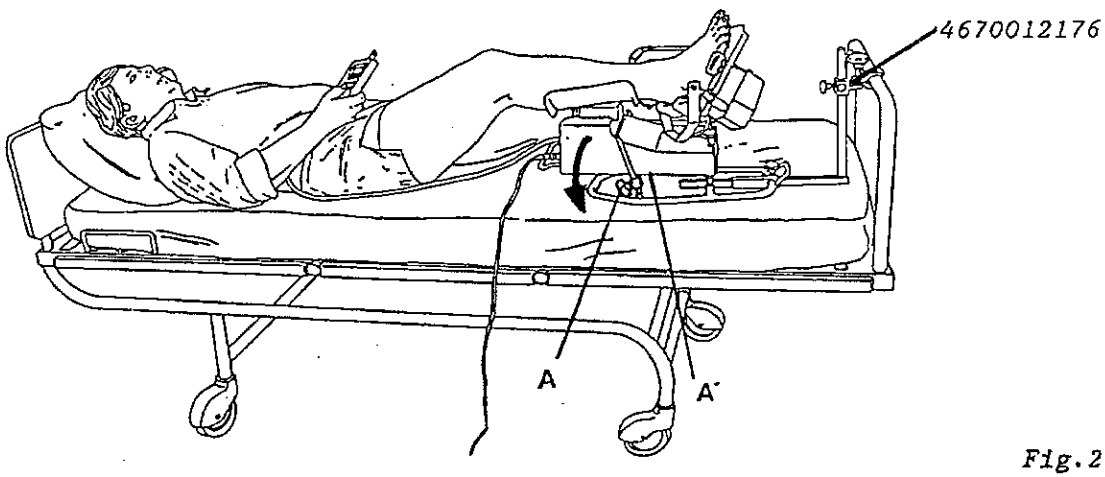

Fig.2

- *Place the machine on the foot of the bed.*
- *The machine should be at maximum tilt obtained by :*
  - *unscrew knobs A and A'*
  - *gently lower the machine to the end stop*
  - *re-tighten knobs A and A'.*
- *Position the patient's leg.*

To improe stability on the mattress the machine has a prop to fix the base ring to the bed (see " FIXING THE MACHINE TO THE BED").
These first adjustments should be fine tuned after fixing the foot to the machine..

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ADJUSTMENT OF THE ANKLE SUPPORT

Fig.3

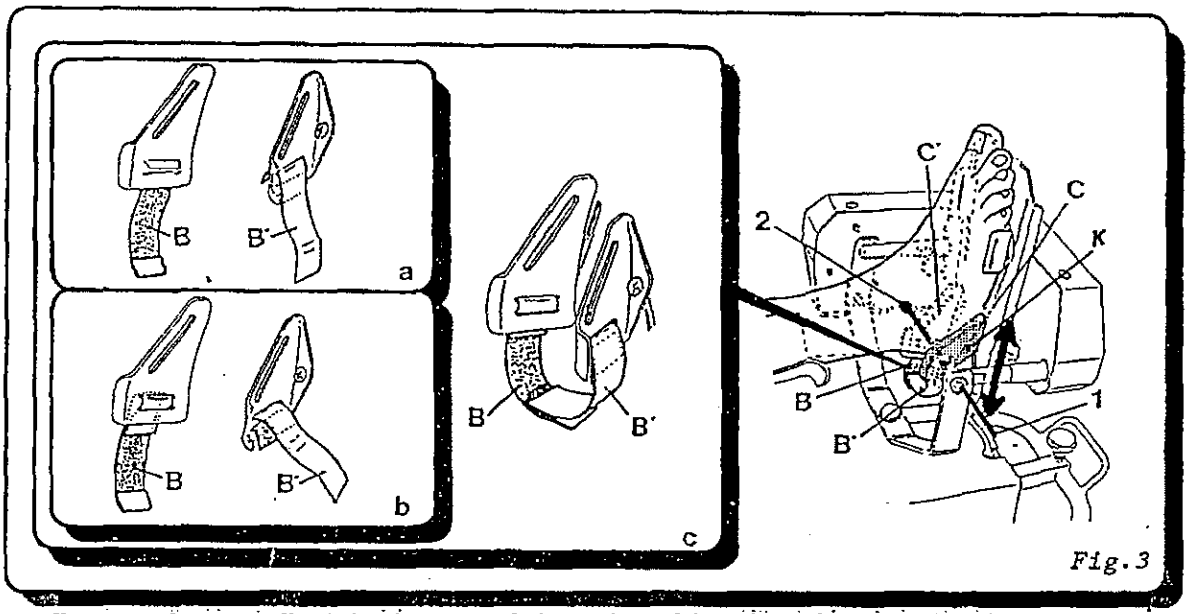

Fig.3

- *Unscrew 2 screw K with the screwdriver (to ship with the exerciser)*
- *Position straps B and B' as shown in diagrams a, b and c.*
- *Place the foot on the sole plate matching the axis of the machine's hinge (1) to the axis of the ankle joint (2) by raising or lowering the two supports C and C'.*
- *Re-tighten 2 screw K.*
- *Ajust the straps B and B'.*

ADJUSTING THE HEIGHT OF THE FOOT

Fig.4

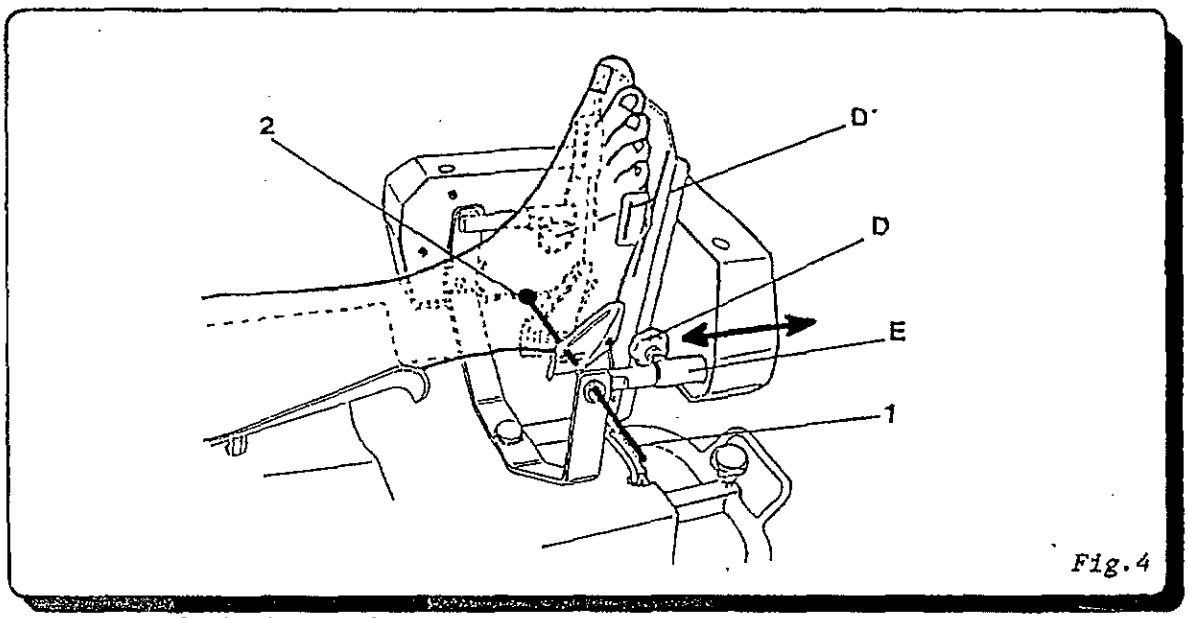

Fig.4

- *Unscrew the knobs D and D'.*
- *Measure the height of the foot.*
- *Report this value on the machine by sliding the assembly E forwards or backwards.*
- *Re-tighten the knobs D and D'.*

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ADJUSTING THE CALF SUPPORT

Fig.5

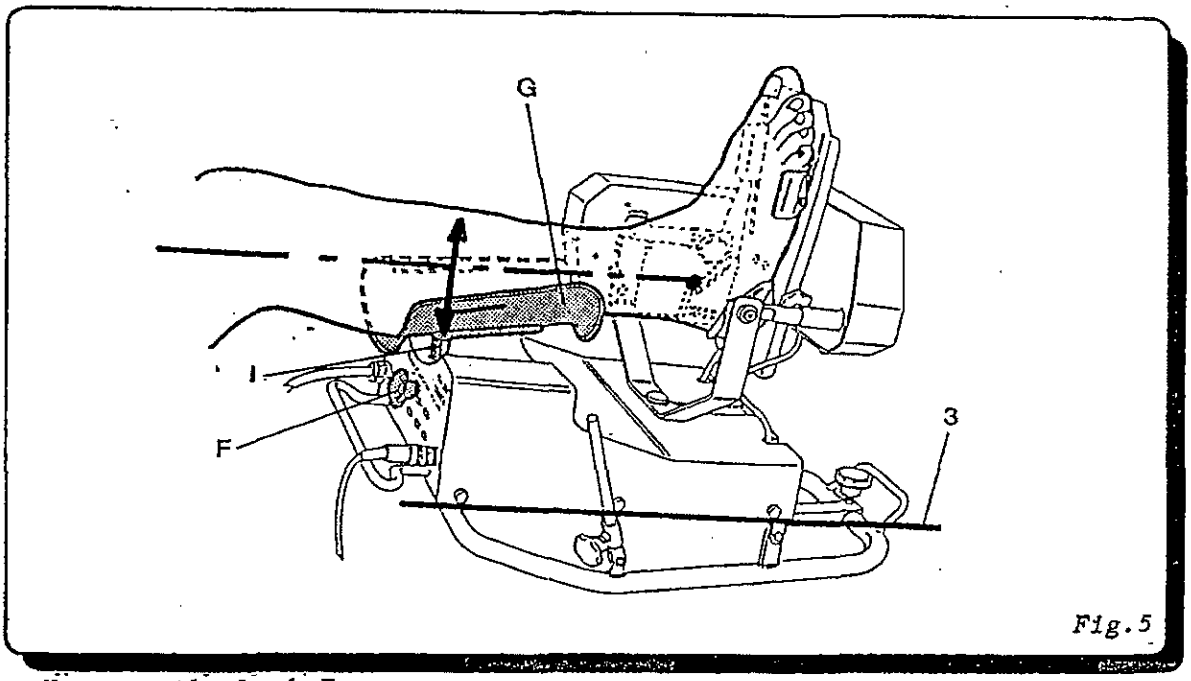

Fig.5

- *Unscrew the knob F.*
- *Raise or lower the calf support G, so that the axis of the leg becomes parallel to the bases (3) of the machine.*
- *Re-tighten the knobs F.*
- *Look the label I for futher setting.*

FIXING THE PATIENT'S LEG TO THE MACHINE

Fig.6

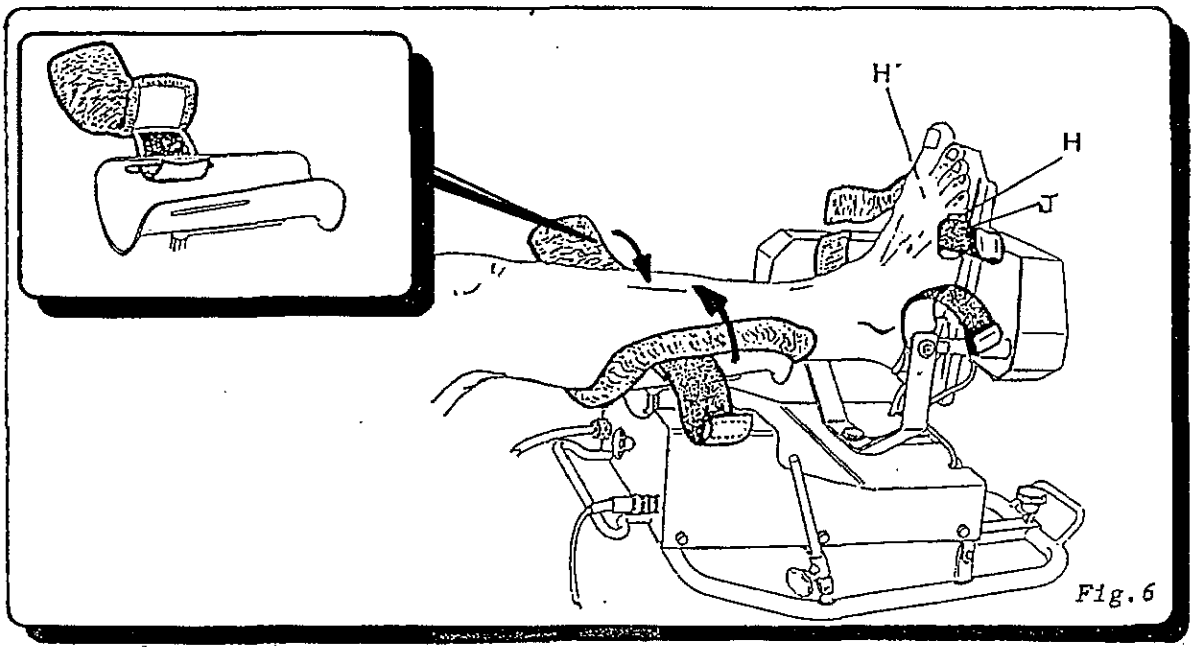

Fig.6

- *Unscrew the 2 screws J.*
- *Jam the foot between the two pads H and H' by sliding them as needed in their grooves. Re-tighten the 2 screws J.*
- *Fix the patient's leg to the machine using the circular straps supplied :*
  - *for the calf use the 8cm (3,1inch) wide strap*
  - *for the ankle use the large use the large 3,5cm (1,4inch) wide strap*
  - *for the top of the foot use the small 3,5cm (1,4inch) wide strap.*

Order number for a complete set of circular straps : 4650000167.

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FINAL ADJUSMENT

Fine tune the adjustment of the machine's position to obtain the most comfortable position for the patient, depending on the mode of use :

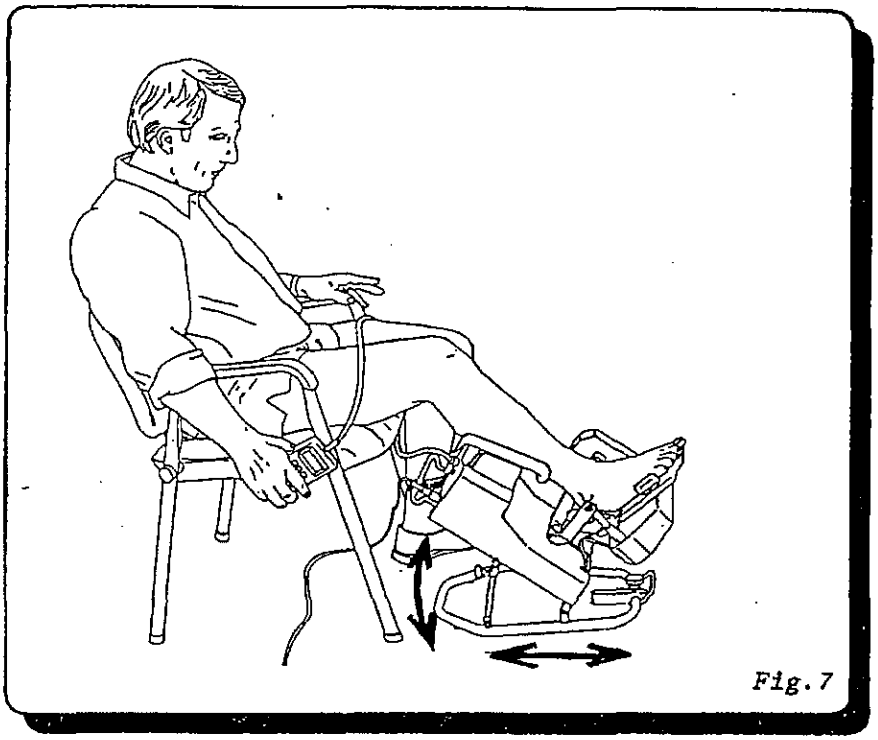


Fig.7

IN A CHAIR

Fig.7

Shift the machine on the bed and adjust it's tilt.

IN A BED

Fig.8

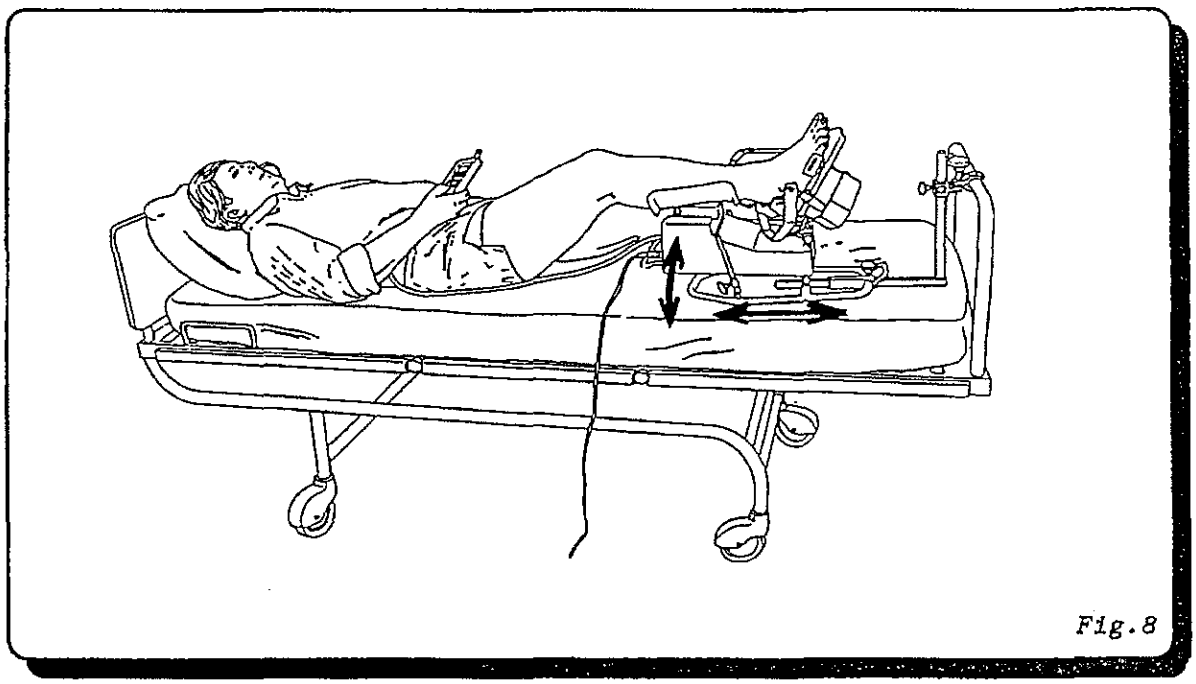
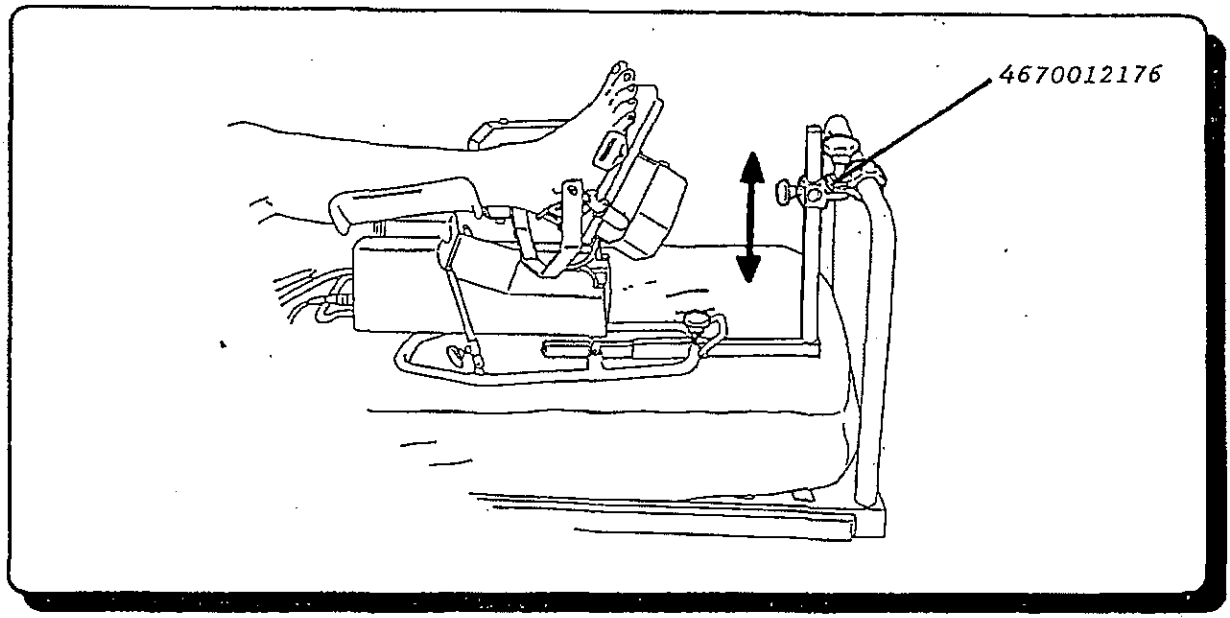


Fig.8

Shift the machine on the bed and adjust it's tilt.

FIXING THE MACHINE TO THE BED

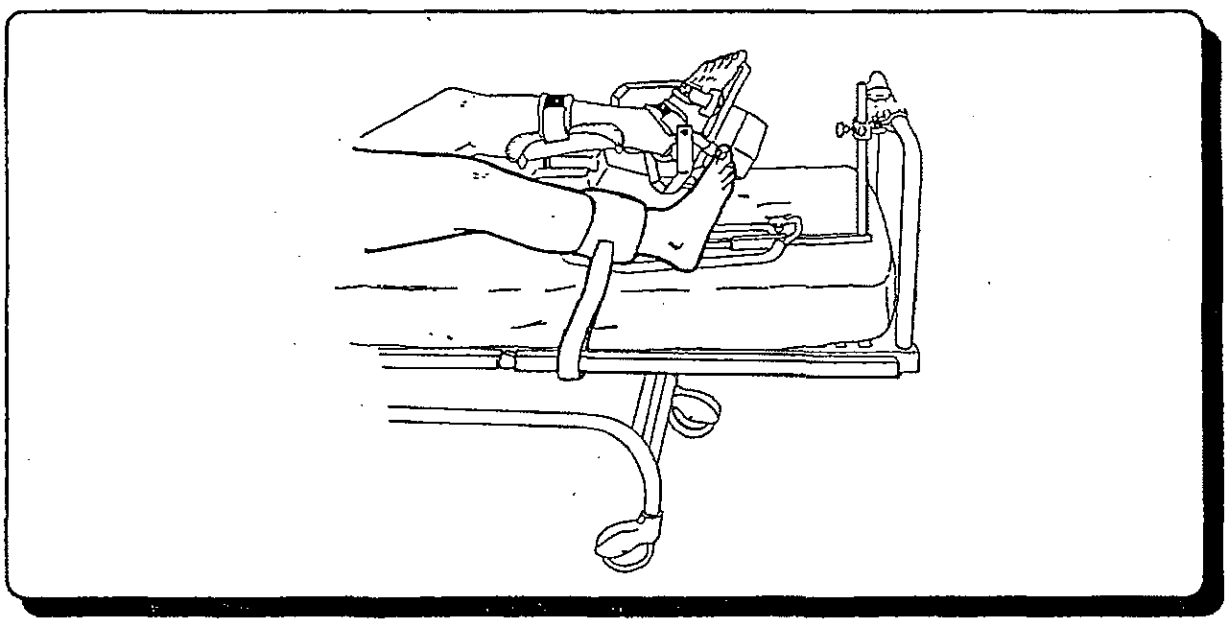
Fig.9



To improve the stability of the machine on the bed use the prop for the of the bed (Ref : 4670012176, supplied with the machine.
It is dixed to the horizontal bar of the bed or one of the bards of a traction frame.

PROTECTION OF THE OPPOSITE FOOT

Fig.10



EXTRA SAFETY
When using the machine inb ed it is recommended to restaing the opposite foot so that it does not impede the correct working of the machine.
Use the strap supplied with the machine for this purpose.
Order number for a replacement strap : 4650000927

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VII INSTRUCTIONS IN CASE OF A BREAKDOWN

After switching on the power supply to the machine using the switch (C)(cf. Page 3) :

- *If the machine fails to operate, and if no pilot light lights up:*
  - *Check the electrical connections.*
  - *Check at the mains socket that power supply is switched on by using another electrical device.*

- *If the machine fails to operate, but the pilot lights are lit up :*
  - *Press the START button once again.*

- *If the machine still fails to operate after that :*
  - *Return the machine to your nearest specialist.*

LIST OF ERRORS

N°	COMMENTS
00	*Microprocessor error (parasites, operating defect). Switch OFF the current.*
02	*Memory full. Data memorized to be erased. When powerer, the display unit indicates* Err. 02 *then, after 5 seconds* IMP. ? *(print-out ?) you must :* - *Either connect the splint to a PC and use the data transfer in the KINETEC software.* - *Or connect the splint to a printer (the data can no longer be transferred to a PC and press the* MODE *key all the data are inscribed on the printer, and erased from the splint memory.* - *Or you can erase the latest session recorded from the memory, (this only makes it possible to re-do a single new session) by pressing the* STOP *key.* - *Or erase some of the elements stored in the memory by typing F0 (technical catalog § 1.2).*
03	*Value requested is outside the authorized limits Return to prior display after 3 seconds.*
11	*Connection error at control box. To change the code, consult the nearest specialist; either this or several keys have been pressed in the course of switching on the power supply then switch on again.*
13	*Maximum motor intensity authorized has been exceeded:* - *Return the machine to your nearest specialist.*
14	*P1, P2 or P3 position measurement cut off:* - *Return the machine to your nearest specialist.*

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GUARANTEE LIMITS

The KINETEC guarantee is strictly limited to free replacement or to repairs at the plant of the part or parts acknowledged as defective.

KINETEC guarantees is passive articulary mobilization apparatus for 1 year from the date of purchase by the consumer against any manufacturing defect.

KINETEC alone is qualified to judge as to the application of the guarantee on its apparatus.

The guarantee cannot be applied if the apparatus has been subject to abnormal use or has been used in circumstances other than those stipulated in our user manual.

The guarantee will not be applied, either, in case of deterioration or accident due to negligence, lack of supervision or maintenance resulting from a transformation of the equipement or from an attempt to repair the equipment.

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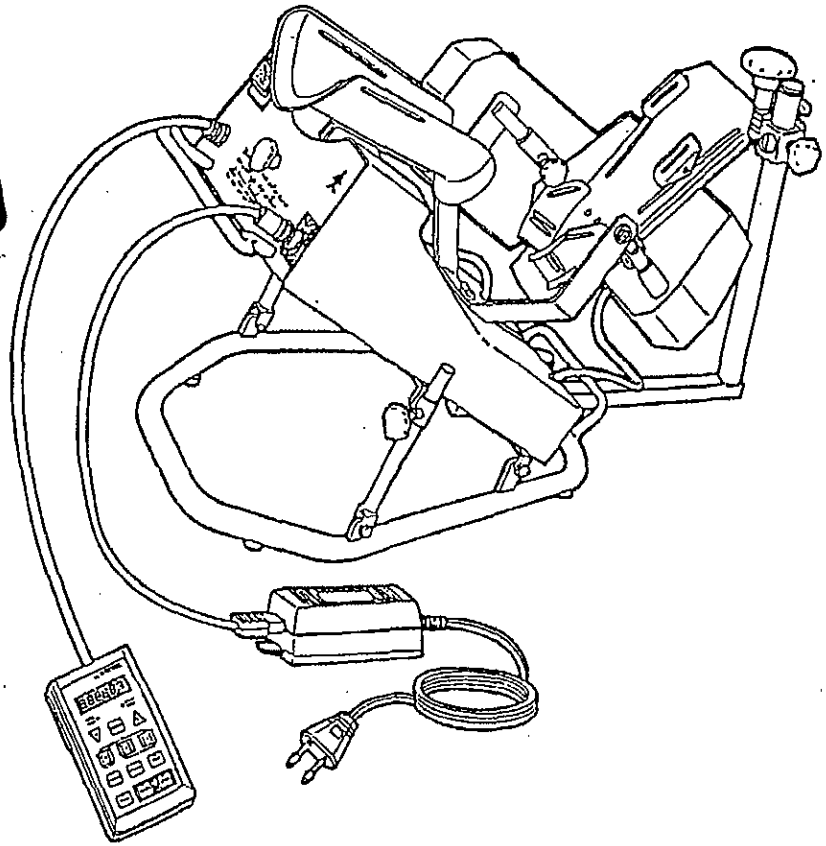
PI AREIL DE MOBILISATIO . ARTICULAIRE PASSIVE DE L'ARRIERE PIED ADU. TE
'ASSIVE ARTICULATORY MOBILISATION DEVICE FOR THE TOP OF FEET ADULT'S
GERÄT FÜR PASSIVE GELENKBEWEGUNG DES HINTEREN ERWACHSENEFUSSES

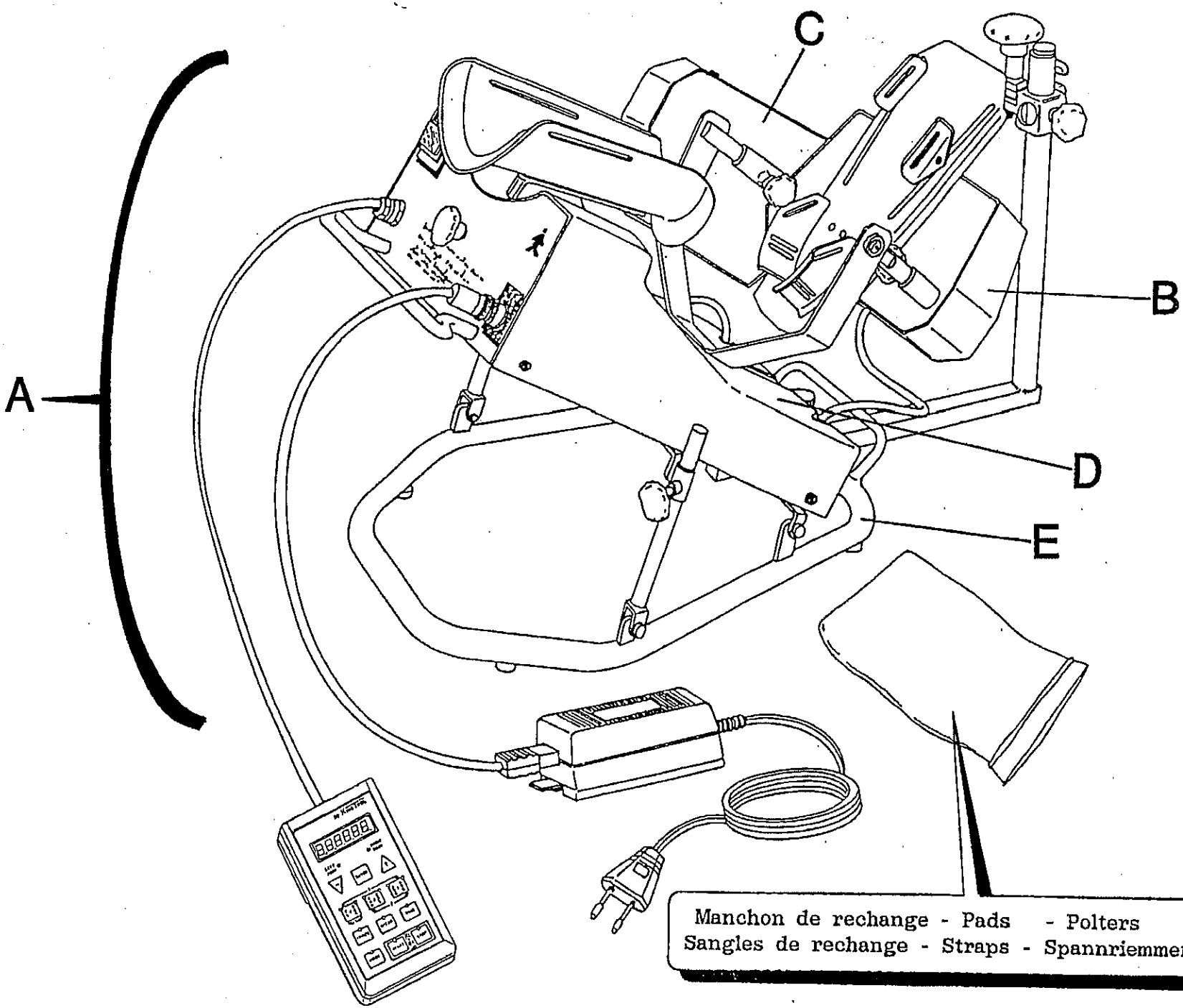
A PARTIR DE L'ATTELLE N° 24
FROM SPLINT NUMBER 24
AB ANHANGUNG N° 24



REF : 5190

NOMENCLATURE DES PIECES DETACHEES
NOMENCLATURE OF SPARE PARTS
NOMENKLATUR DER ERSATZTEILE

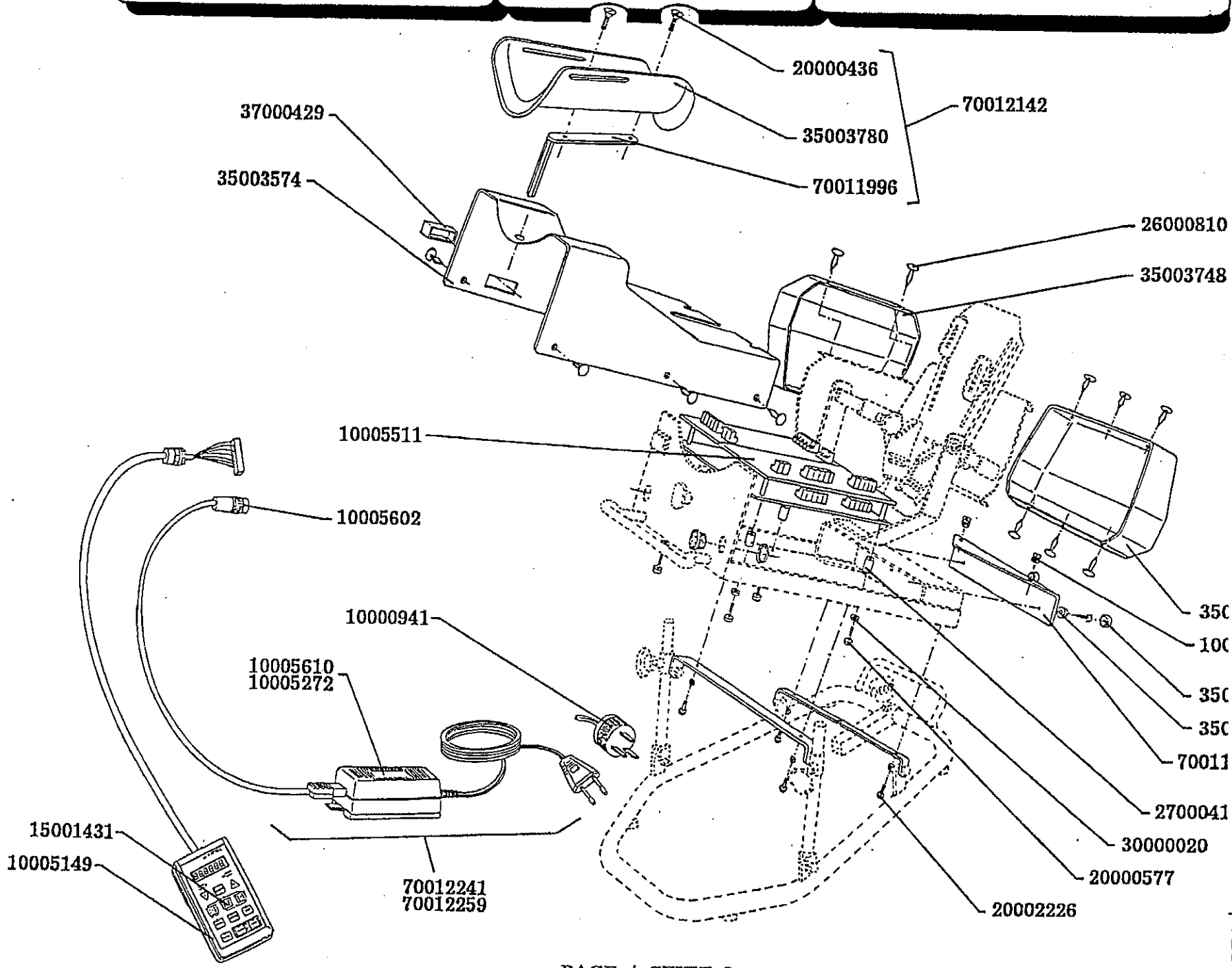
COGEMO se reserve le droit de toutes modifications techniques.
COGEMO reserves the right to effect technical modifications.
COGEMO behält sich das Recht vor, jegliche technische Änderungen durchzuführen.



Manchon de rechange - Pads - Polters -500007
Sangles de rechange - Straps - Spannriemmen - 50000

PAGE / SEITE 1

	SOMMAIRE	CONTENTS	INHALTSVERZEICHNIS	PAGE/SEITE
A	ARMATURE DE L'ATTELLE	SPLINT ARMATURE	ARMATUR DER ANHÄNGUNG	3 - 4
B	MOTORISATION AXE ABD/ADD	ABD/ADD SHAFT MOTOR	ANTRIED ACHSE ABD/ADD	5 - 6
C	MOTORISATION AXE PL/DOR	PL/DOR SHAFT MOTOR	ANTRIED ACHSE PL/DOR	7 - 8
D	MOTORISATION AXE VAR/VAL	VAR/VAL SHAFT MOTOR	ANTRIED ACHSE VAR/VAL	9 - 10
E	ENSEMBLE SOCLE	ASSY BASE	ZUSAMMEN DER RAHMEN	11 - 12



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REF. NUMBER REST.Nr.	Q. Q. ANZ.	DESIGNATION	DESIGNATION	BEZEICHNUNG
10000941	1	Prise hopital grade 85215 C	Main plug U.L hopital garde	Schukostecker, U.L
10002955	2	Passe fil 2515	2515 stuffing box	Kabeldurchführung
10005149	1	Clavier 150x80x30mm	Keyboard 150x80x30mm	Tastatur 150x80x30mm
10005272	1	Transformateur boitier 220V50HZ/12v 3,4A	V.D.E transformer	Transformator V.D.E
10005511	1	Carte cheville adulte	Adulte ankle board	Schalt platine für stift erwachs
10005602	1	Connecteur 3 broches femelle	Cable plug socket (3 holes)	Kabelstecker, 3 loch
10005610	1	Transformateur boitier 115V60HZ/12v 2,4A	U.L tranformer	Transformator U.L
15001431	1	Clavier TP ADH 65x60mm	TP keyboard ADH 65x60mm	Tastatur
20000436	2	Vis TF M6x10mm	TF screw M6x10mm	Schraube TF
20000577	4	Vis TCF M3x25mm	TCF stainless steel screw	Schraube TCF, Inox
20002226	6	Vis B cruci.H M4x10mm	Screw B stanley H M4x10mm	Schraube B, Kreuzkopf
26000810	16	Attache a pression blanche	White snap fasterner	Schieber weiss
27000413	4	Entretoise nylon ø 3,2x6x15mm	Nylon brace 3,2x6x15mm	Nylon-Zwischenstück
30000020	4	Rondelle AZ ø 3mm	AZ ø 3mm washer	Unterlegscheibe AZ
35000497	2	Rondelle cape M4	Cap washer M4	Unterlegscheibe des Deckels
35003574	1	Carter inférieur ABS	Lower casing	Unteres Gehäuse
35003730	1	Carter arriére ABS	Rear casing	Hinteres Gehäuse
35003748	1	Carter latèral ABS	Lateral casing	Seitliches Gehäuse
35003764	2	Cape protection blanche M4	Protective cap M4	Schutzdeckel
35003780	1	Support mollet poly	Calf support	Träger für Wade
37000429	1	Cache connecteur	Connector cover	Versteck kabelstecker
70011938	1	Tole avant trapezoidale	The front sheet metal	Voreisenblech
70011996	1	Support coulissant gouttière	Gutter sliding support	Trägerfuge Dachrinne
70012142	1	Gouttière monteé	Mounted gutter	Dachrinne gestiegen
70012241	1	Ensemble transformateur 220V	Transformer assy 220V	Zusammen Transformator 220V
70012259	1	Ensemble transformateur 115V	Transformer assy 115V	Zusammen Transformator 115V

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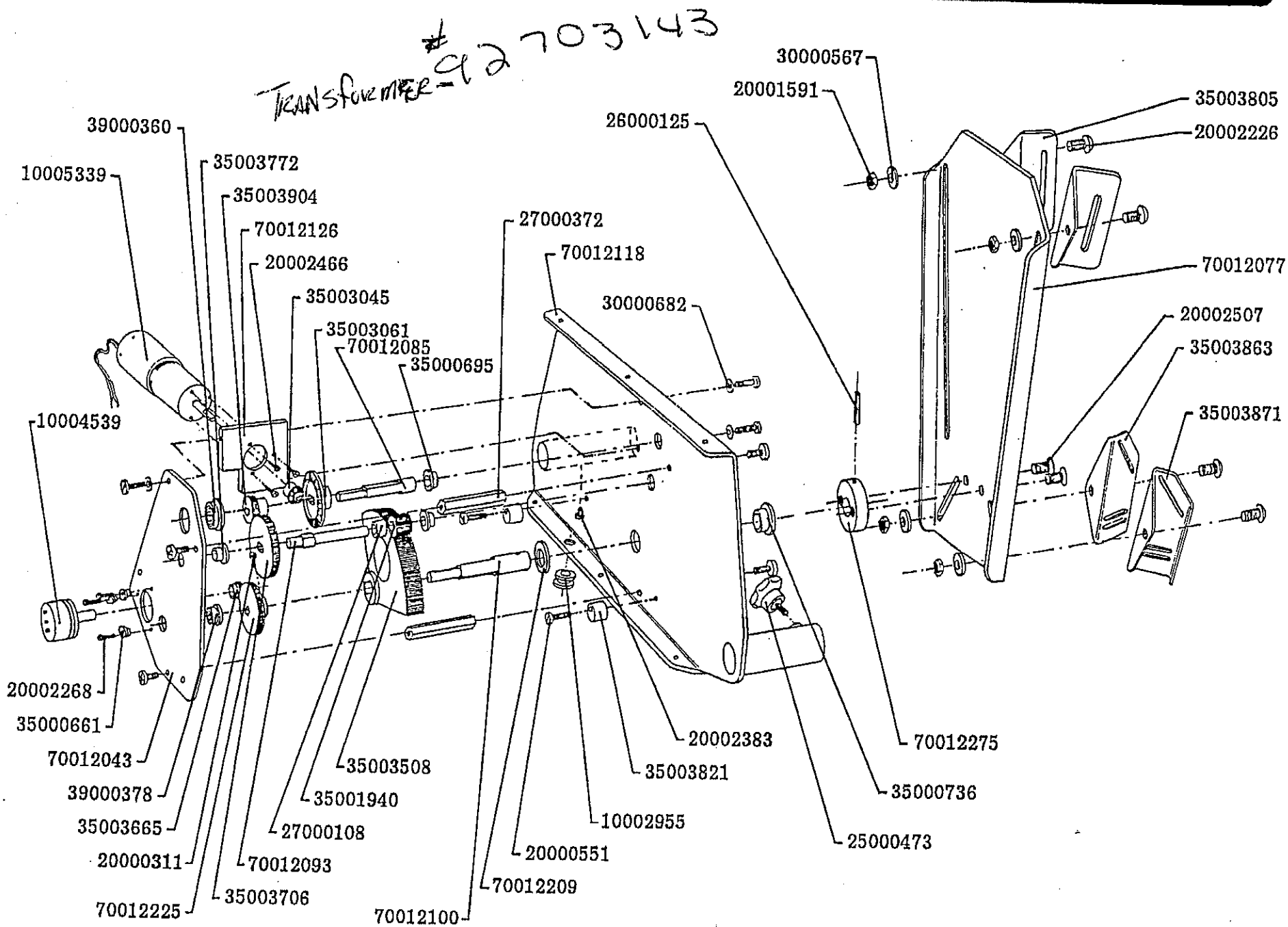

REF. NUMBER BEST.Nr.	Q. Q. ANZ.	DESIGNATION	DESIGNATION	BEZEICHNUNG
10002955	1	Passe fil 2515	2515 stuffing box	Kabeldurchführung
10004539	1	Potentiomètre copie 10K	Copy potentiometer 10K	Kopierpotentiometer 10 kOhm
10005339	1	Moteur	Motor	Motor
20000311	1	Vis TF zing M3x8mm	TF screw M3x8mm	Schraube TF
20000551	5	Vis TCF inox M3x12mm	TCF screw M3x12mm	Schraube TCF, Inox
20001591	4	Ecrou H M4mm	M4 nut	Mutter
20002226	8	Vis B cruci.H M4x10mm	Screw, B stanley H M4x10mm	Schraube B, Kreuzkopf
20002268	3	Vis B cruci.H M2,5x6mm	Screw, B stanley H M2,5x6mm	Schraube B, Kreuzkopf
20002383	1	Vis F cruci.H M3x6mm	Screw, F stanley H M3x6mm	Schraube F, Kreuzkopf
20002466	3	Vis B cruci.H M2x8mm	Screw, B stanley H M2x8mm	Schraube B, Kreuzkopf
20002507	2	Vis TF M4x12mm	TF screw M4x12mm	Schraube TF
25000473	2	Bouton ser. male noir M6x15mm	Locking knob	Verriegelungsschraube
26000125	1	Goupille caneleé G6P inox Ø 4x30mm	Splined pin, stainless steel Ø 4x30mm	Geriffelter Splint aus Inox
27000108	1	Entretoise brute Ø 6x8x8mm	Ø 6x8x8mm spacer	Distanzhülse, Ø 6x8x8mm
27000372	2	Entretoise HX. zing M4x35mm	4x35mm HX spacer	Distanzhülse HX, 4x35mm
30000567	4	Rondelle nylon Ø 4,3x8x1mm	Ø 4,3x8x1mm nylon washer	Unterlegscheibe aus Nylon
30000682	3	Rondelle inox Ø 3,25x8x0,8mm	Ø 3,25x8x0,8mm plate washer	Unterlegscheibe, 3,25x8x0,8mm
35000661	3	Bride de serrage 915 05029	Potentiometer flange	Potentiometerflansch
35000695	2	Palier Ø 6x10x6mm	Bearing Ø 6x10x6mm	Flanschlager
35000736	1	Palier Ø 10x16x8mm	Bearing Ø 10x16x8mm	Flanschlager
35001940	1	Pignon 15 dents	15D pinion	Ritzel
35003045	1	Pignon C1505 ETG100	C1505 ETG100 pinion	Ritzel
35003061	1	Pignon C6005 ETG100	C6005 ETG100 pinion	Ritzel
35003508	1	Pignon 1/4 120 dents	1/4 120D pinion	Ritzel
35003665	1	Pignon D2005 PLD plastique	D2005 PLD plastic pinion	Ritzel PLD, Plastik
35003706	1	Pignon D8005 ETG100	D8005 ETG100 pinion	Ritzel
35003772	1	Bague épaulée bronze Ø 4x8x8mm	Bronze collared ring Ø 4x8x8mm	Ring mit Auflageschulter aus Bronze
35003805	2	Contre appui poly	Foot rest	Stützpunkt
35003821	2	Butée d'amplitude	Thrust block	Eckpfeiler
35003863	1	Contre appui talon gauche	Lelt heel rest	Hacken linken stützpunkt
35003871	1	Contre appui talon droit	Right heel rest	Hacken rechten stützpunkt
35003904	1	Pignon D20 05 ETG100	D2005 ETG100 pinion	Ritzel
39000360	1	Roulement Ø 4x13x5mm	Bearing Ø 4x13x5mm	Lager
39000378	1	Roulement Ø 6x13x5mm	Bearing Ø 6x13x5mm	Lager
70012043	1	Contre plaque ABD/ADD	ABD/ADD Counter-support	Gegen platte ABD / ADD
70012077	1	Semelle	Sole	Sohle
70012085	1	Axe moteur	Motor shaft	Achse motor
70012093	1	Axe intermediaire	Counter shaft	Zwischenachse
70012100	1	Axe de sortie ABD/ADD	ABD/ADD shaft	Achse ABD/ADD
70012118	1	Plaque ABD/ADD	ABD/ADD support	Platte ABD/ADD
70012126	1	Support moteur	Motor support	Halter für Motor
70012209	1	Rondelle Ø 24x16,1x2,6mm ABD/ADD	ABD/ADD Ø 24x16,1x2,6mm washer	Unterlegscheitbe 24x16,1x2,6mm
70012225	1	Pignon D8005 PLD plastique perce tarandage	D8005 PLD plastic pinion	Ritzed PLD, Plastik
70012275	1	Embase de fixation de la semelle	Fixing washer of the sole	Scheibchen für festsetzung die sohle

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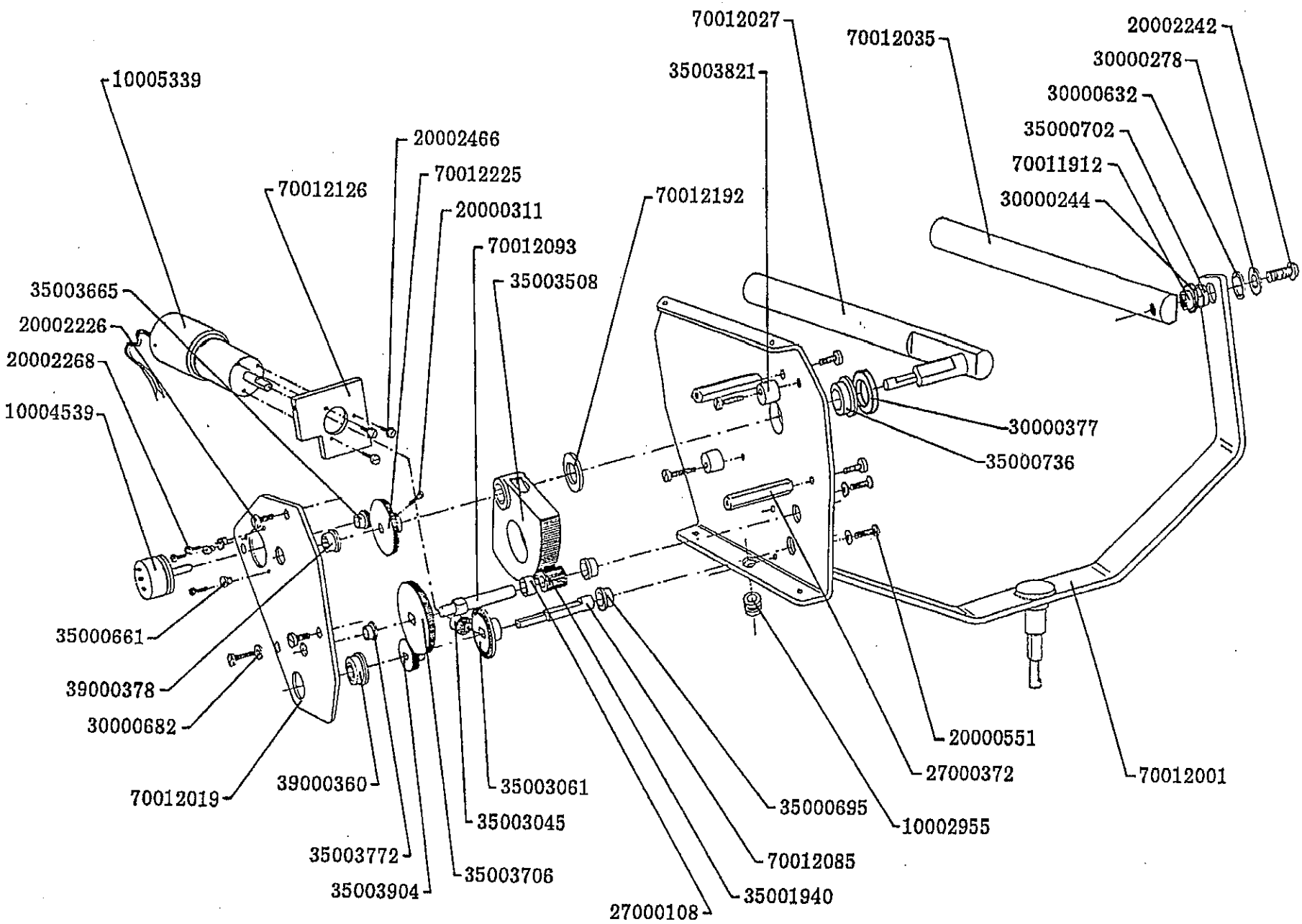

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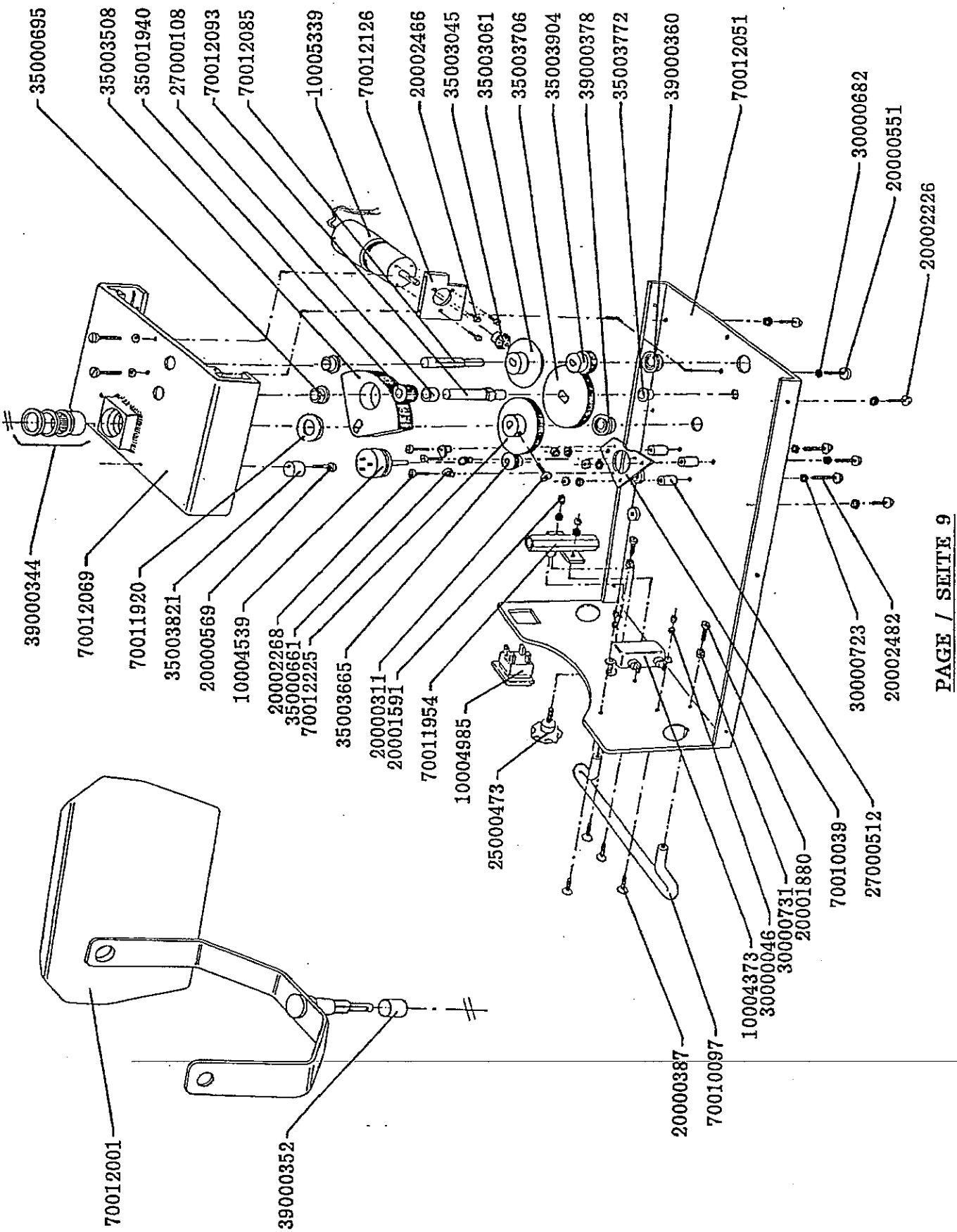
REF. NUMBER BEST.Nr.	Q. Q. ANZ.	DESIGNATION	DESIGNATION	BEZEICHNUNG
10002955	1	Passe fil 2515	2515 stuffing box	Kabeldurchführung
10004539	1	Potentiomètre copie 10K	Copy potentiometer 10K	Kopierpotentiometer 10 kOhm
10005339	1	Moteur	Motor	Motor
20000311	1	Vis TF zing M3x8mm	TF screw M3x8mm	Schraube TF
20000551	5	Vis TCF inox M3x12mm	TCF stainless steel screw M3x12mm	Schraube TCF, Inox
20002226	4	Vis B cruci.H M4x10mm	Screw, B stanley H M4x10mm	Schraube B, Kreuzkopf
20002242	1	Vis B cruci.H M6x20mm	Screw, B stanley H M6x20mm	Schraube B, Kreuzkopf
20002268	3	Vis B cruci.H M2,5x6mm	Screw, B stanley H M2,5x6mm	Schraube B, Kreuzkopf
20002466	3	Vis B cruci.H M2x8mm	Screw, B stanley H M2x8mm	Schraube B, Kreuzkopf
27000108	1	Entretoise brute Ø 6x8x8mm	Ø 6x8x8mm spacer	Distanzhülse, Ø 6x8x8mm
27000372	2	Entretoise HX. zing M 4x35mm	4x35mm HX spacer	Distanzhülse HX, 4x35mm
30000244	1	Rondelle plate zing 6x12x1mm	Ø 6x12x1mm plate washer	Unteriegscheibe, 6x12x1mm
30000278	1	Rondelle pla.brut Ø 6,2x18x1,2mm	Ø 6,2x18x1,2mm plate washer	Unteriegscheibe, 6,2x18x1,2mm
30000377	1	Rondelle plate CB Ø 10,2x16x1mm	Ø 10,2x16x1mm olate washer	Unteriegscheibe, 10,2x16x1mm
30000632	1	Ronelle nylon Ø 12x18x2mm	Ø 12x18x2mm nylon washer	Unterlegscheibe, 12x18x2mm
30000682	3	Rondelle plate inox Ø 3,25x8x0,8mm	Ø 3,25x8x0,8mm plate washer	Unterlegscheibe, 3,25x8x0,8mm
35000661	3	Bride de serrage 915 05029	Potentiometer flange	Potentiometerflansch
35000695	2	Palier Ø 6x10x6mm	Bearing Ø 6x10x6mm	Flanschlager
35000702	1	Palier Ø 8x12x8mm	Bearing Ø 8x12x8mm	Flanschlager
35000736	1	Palier Ø 10x16x8mm	Bearing Ø 10x16x8mm	Flanschlager
35001940	1	Pignon 15 dents	15D pinion	Ritzel
35003045	1	Pignon C1505 ETG100	C1505 ETG100 pinion	Ritzel
35003061	1	Pignon C6005 ETG100	C6005 ETG100 pinion	Ritzel
35003508	1	Pignon 1/4 120 dents	1/4 120D pinion	Ritzel
35003665	1	Pignon D2005 PLD plastique	D2005 PLD plastic pinion	Ritzel PLD, Plastik
35003706	1	Pignon D8005 ETG100	D8005 ETG100 pinion	Ritzel
35003772	1	Bague épaulée bronze Ø 4x8x8mm	Bronze collared ring Ø 4x8x8mm	Ring mit Auflageschulter aus Bronze
35003821	2	Butée d'amplitude	Thrust block	Eckpfeiler
35003904	1	Pignon D20 05 ETG100	D2005 ETG100 pinion	Ritzel
39000360	1	Roulement Ø 4x13x5mm	Bearing Ø 4x13x5mm	Lager
39000378	1	Roulement Ø 6x13x5mm	Bearing Ø 6x13x5mm	Lager
70011912	1	Entretoise taraudeé M 6x9mm	6x9mm spacer	Distanzhülse, 6x9mm
70012001	1	Etrier vertical	Vertical stirrup	Vertikaler sattel
70012019	1	Contre face	Counter-face	Gegendeckplatte
70012027	1	Axe gauche	Left shaft	Achse linke
70012035	1	Axe droit	Right shaft	Achse rechte
70012085	1	Axe moteur	Motor shaft	Achse motor
70012093	1	Axe intermediaire	Counter shaft	Zwischenachse
70012126	1	Support moteur	Motor support	Halter für Motor
70012192	1	Rondelle Ø 24x10,1x2,6mm PL/DOR	Ø 24x10,1x2,6mm washer	Unterlegscheibe, 24x10,1x2,6mm
70012225	1	Pignon D8005 PLD plastique perce tarandage	D8005 PLD plastic pinion	Ritzed PLD, Plastik

D. MOTORISATION AXE VAR/VAL

D. VAR/VAL SHAFT MOT

D. ANTRIEB ACHSE VAR/V



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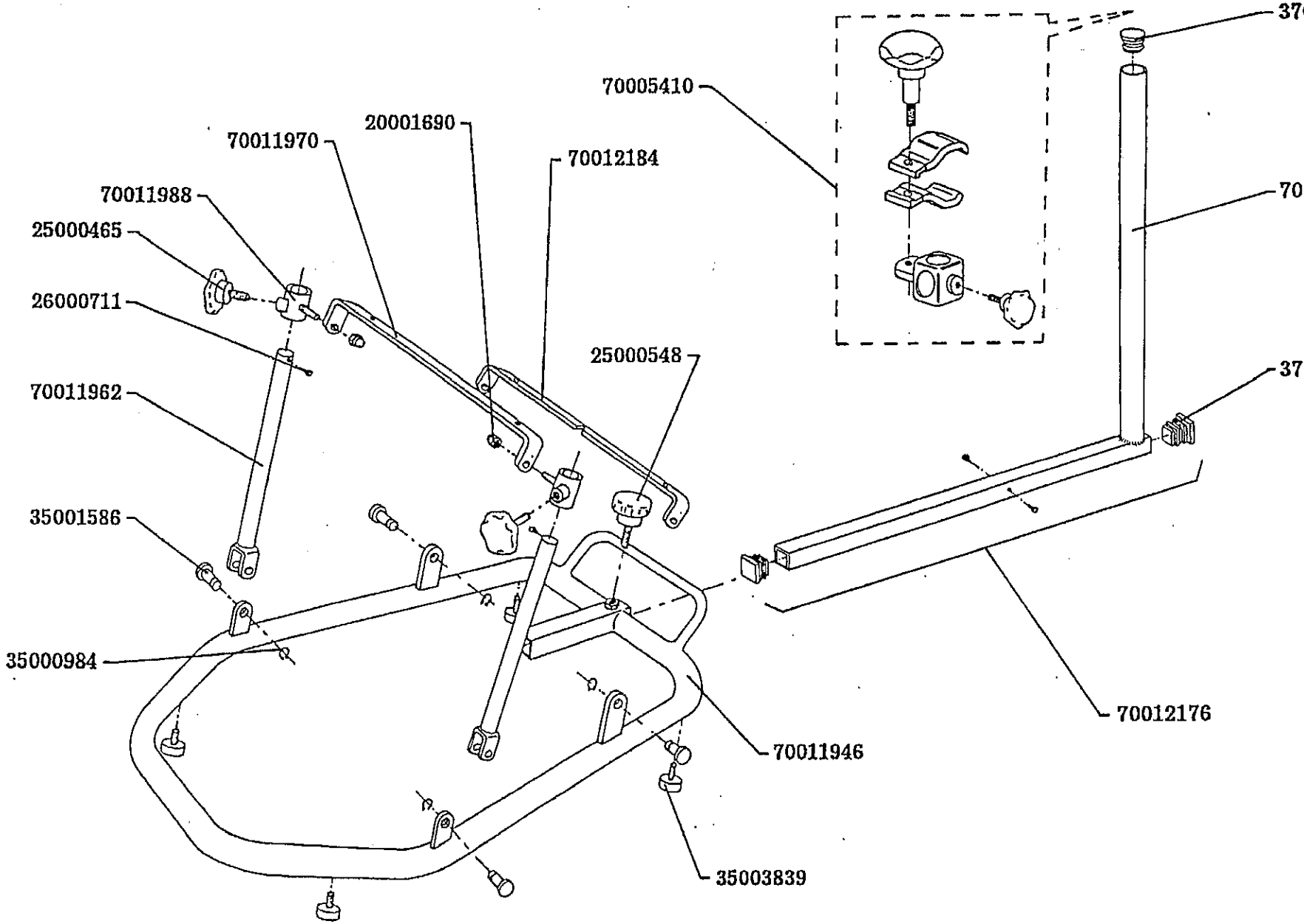
REF. NUMBER BEST.Nr.	Q. Q. ANZ.	DESIGNATION	DESIGNATION	BEZEICHNUNG
10004373	1	Filtre boitier 6A cosses 6-35	Filter case 6A terminals 6-35	Filter Gehäuse
10004539	1	Potentiomètre copie 10K	Copy potentiometer 10K	Kopierpotentiometer 10 kOhm
10004985	1	Interrupteur bipol. lumineux 12V	Two-pole switch incorp. indicator light 12V	Zweipoliger Schalter mit Kontrollampe 12V
10005339	1	Moteur	Motor	Motor
20000311	1	Vis TF zing M3x8mm	TF screw M3x8mm	Schraube TF
20000387	4	Vis TF inox M4x10mm	TF screw M4x10mm	Schraube TF, Inox
20000551	3	Vis TCF inox M3x12mm	TCF stainless steel screw M3x12mm	Schraube TCF, Inox
20000569	2	Vis C S M3x16mm	C S screw M3x16mm	Schraube C S
20001591	7	Ecrou H M4mm	M4 locknut	Mutter
20001880	2	Vis CHC inox M4x10mm	4 x 10mm CHC screw	Schraube CHC, Inox
20002226	4	Vis B cruci.H M4x10mm	Screw, B stanley H M4x10mm	Schraube B, Kreuzkopf
20002268	3	Vis B cruci.H M2,5x6mm	Screw, B stanley H M2,5x6mm	Schraube B, Kreuzkopg
20002466	3	Vis B cruci.H M2x8mm	Screw, B stanley H M2x8mm	Schraube B, Kreuzkopg
20002482	3	Vis B cruci.H M4x25mm	Screw, B stanley H M4x25mm	Schraube B, Kreuzkopg
25000473	1	Bouton ser. male noir M6x15mm	Locking knob	Verriegelungsschraubr
27000108	1	Entretoise brute Ø 6x8x8mm	Ø 6x8x8mm spacer	Distanzhülse, Ø 6x8x8mm
27000512	3	Entretoise poly Ø 4,2x8x12mm	Ø 4,2x8x12mm spacer	Distanzhülse, Ø 4,2x8x12mm
30000046	4	Rondelle dec. zing Ø 4mm AZ	AZ Ø 4mm washer	Unterlegscheibe AZ Ø 4mm
30000682	3	Rondelle plate inox Ø 3,25x8x0,8mm	Ø 3,25x8x0,8mm plate washer	Unterlegscheibe, 3,25x8x0,8mm
30000723	3	Rondelle AZ bronze phospho.Ø 4mm	Ø 4mm AZ washer	Unterlegscheibe AZ Ø 4mm
30000731	2	Rondelle plate laiton Ø 4x10x1mm	Ø 4x10x1mm plate washer	Unterlegscheibe, 4x10x1mm
35000661	3	Bride de serrage 915 05029	Potentiometer flange	Potentiometerflansch
35000695	2	Palier Ø 6x10x6mm	Bearing Ø 6x10x6mm	Flanschlager
35001940	1	Pignon 15 dents	15D pinion	Ritzel
35003045	1	Pignon C1505 ETG100	C1505 ETG100 pinion	Ritzel
35003061	1	Pignon C6005 ETG100	C6005 ETG100 pinion	Ritzel
35003508	1	Pignon 1/4 120 dents	1/4 120D pinion	Ritzel
35003665	1	Pignon D2005 PLD plastique	D2005 PLD plastic pinion	Ritzel PLD, Plastik
35003706	1	Pignon D8005 ETG100	D8005 ETG100 pinion	Ritzel
35003772	1	Bague epaulée bronze Ø 4x8x8mm	Bronze collared ring Ø 4x8x8mm	Ring mit Auflageschulter aus Bronze
35003821	2	Butée d'amplitude	Thrust block	Eckpfeiler
35003904	1	Pignon D20 05 ETG100	D2005 ETG100 pinion	Ritzel
39000344	1	Roul. combi.NKX15 Ø 15x24x23mm	NKX15 combined bearing	Gesamtlager NKX15
39000352	1	Bague int. IR Ø 12x15x16mm	Internal ring IR Ø 12x15x16mm	Innenring
39000360	1	Roulement Ø 4x13x5mm	Bearing Ø 4x13x5mm	Lager
39000378	1	Roulement Ø 6x13x5mm	Bearing Ø 6x13x5mm	Lager
70010039	1	Support potentiomètre	Potentiometer mounting	Halter für potentiometer
70010097	1	Poignée transport	Carry handle	Tragegriff
70011920	1	Rondelle Ø 12,1x36x2,6mm UZ40	Ø 12,1x36x2,6mm washer	Unterlegscheibe, 21,1x36x2,6mm
70011954	1	Support fixe	Fixed support	Fixehalter
70012001	1	Etrier vertical	Vertical stirrup	Vertikaler sattel
70012051	1	Chassis	Frame	Chassis
70012069	1	Plaque de pivot VAL/VAR	Pivot sheet VAL / VAR	Zapfenplatte VAL / VAR
70012085	1	Axe moteur	Motor shaft	Achse motor
70012093	1	Axe intermediaire	Countershaft	Zwischenachse
70012126	1	Support moteur	Motor support	Halter für Motor
70012225	1	Pignon D8005 PLD plastique perce tarandage	D8005 PLD plastic pinion	Ritzed PLD, Plastik



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REF. NUMBER BEST.Nr.	Q. Q. ANZ.	DESIGNATION	DESIGNATION	BEZEICHNUNG
20001690	2	Ecrou borgne chromé M6mm	M6 chrome steel nut	Chrommutter M6
25000465	2	Bouton étoile noir male M6x12mm	M6x12mm star locking knob	Verriegelungsschraube Stern
25000548	1	Bouton serrage male noir M8x40mm	Locking knob	Verriegelungsschraube
26000711	4	Rivet cannel inox Ø 2x5mm	2x5mm pin	Stift, 2x5mm
35000984	4	Circlips extèrieur Ø 6mm	External circlip Ø 6mm	Haltering, Aussendurchmesser
35001586	4	Axe chape chromé Ø 6mm	Ø 6mm Spindle	Chromshaft Ø 6mm
35003839	4	Plot elastique	Schock absorber	Stossdämpfer
37000065	1	Embout rond noir 18-20mm	Ø 18-20mm Black cover	Zwingerund Ø 18-20mm
37000180	2	Embout carre noir 18mm	18mm square black cover	Zwingefläche 18mm
70005410	1	Collier de butoir monte	Clamp assy	Klemmenteile
70011946	1	Socle	Base	Rahmen
70011962	2	Guidage vertical droite et gauche	Vertical right or left guiding	Leine lotrecht recht or links
70011970	1	Plat fixation de socle machine extremite	Attachment platte	Platte für Festsetzung
70011988	2	Guidage coulissant droite et gauche	Sliding right or left guiding	Fugeleine Recht or Links
70012168	1	Butoir à 90°	Sliding stop	Ausziehbare stütze
70012176	1	Butoir monte	Sliding stop assy	Ausziehbare stütze und Halterung für klemme
70012184	1	Plat fixation de socle machine central	Attachment platte	Platte für Festsetzung